

## ABSTRACT OF THE DISCLOSURE

A porous sintered body of a calcium phosphate-based ceramic having a porosity of 80 % or more. The porous sintered body is produced by a method comprising the steps of: (1) preparing a slurry comprising a calcium phosphate-based ceramic powder, a water-soluble high molecular compound and a nonionic surface active agent; (2) stirring the slurry vigorously to froth the slurry; (3) solidifying the frothed slurry into a gel; and (4) drying and sintering the gel.